National Institute of Environmental Health Sciences

# Global climate change and infectious diseases

**Author(s):** Shuman EK
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**Abstract:**

Climate change is occurring as a result of warming of the earth's atmosphere due to human activity generating excess amounts of greenhouse gases. Because of its potential impact on the hydrologic cycle and severe weather events, climate change is expected to have an enormous effect on human health, including on the burden and distribution of many infectious diseases. The infectious diseases that will be most affected by climate change include those that are spread by insect vectors and by contaminated water. The burden of adverse health effects due to these infectious diseases will fall primarily on developing countries, while it is the developed countries that are primarily responsible for climate change. It is up to governments and individuals to take the lead in halting climate change, and we must increase our understanding of the ecology of infectious diseases in order to protect vulnerable populations.

## Resource Description

**Communication:** ☒

resource focus on research or methods on how to communicate or frame issues on climate change; surveys of attitudes, knowledge, beliefs about climate change

A focus of content

**Communication Audience:** ☒

audience to whom the resource is directed

Researcher

**Early Warning System:** ☒

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

A focus of content

**Exposure :** ☒

weather or climate related pathway by which climate change affects health

Temperature

**Temperature:** Fluctuations

**Geographic Feature:** ☑

resource focuses on specific type of geography

None or Unspecified

**Geographic Location:** ☑

resource focuses on specific location

Global or Unspecified

**Health Impact:** ☑

specification of health effect or disease related to climate change exposure

Infectious Disease

**Infectious Disease:** Foodborne/Waterborne Disease, Vectorborne Disease

**Foodborne/Waterborne Disease:** Campylobacteriosis, Cholera, Cryptosporidiosis, E. coli, Giardiasis, Norovirus, Salmonellosis, Shigellosis, Vibrioses

**Foodborne/Waterborne Disease (other):** Entamoeba histolytica

**Vectorborne Disease:** Mosquito-borne Disease

**Mosquito-borne Disease:** Dengue, Malaria, West Nile Virus

**Mitigation/Adaptation:** ☑

mitigation or adaptation strategy is a focus of resource

Mitigation

**Population of Concern:** A focus of content

**Resource Type:** ☑

format or standard characteristic of resource

Review

**Timescale:** ☑

time period studied

Time Scale Unspecified